

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

me of Work: Improvements to roads and Drains at Bettahalli colony in ward no-03 of
Yelahanka Satellite Town Sub Division

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
RRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specification No.301 Loading and unloading with 8km lead= (I No-19.14,P No-143,KPWD SR 2018-19)								
Basic rate	41.00							
Area Weightage 6%	2.46							
8km Lead	20.48							
Total	63.94							
	Cum							
New formation								
Bettahalli								
Cross rd-7		1	60.00	5.00	0.30	90.00		
Cross rd-10		1	117.00	5.80	0.30	203.58		
Cross rd-15		1	105.00	5.20	0.30	163.80		
Debris		5	20.00	1.20	0.40	48.00		
C Road								
New formation								
Cross rd-5		1	41.00	4.20	0.20	34.44		
Cross rd-6		1	17.00	4.30	0.20	14.62		
						554.44	63.94	35,450.89
SRRB 300-46. Scarifying by mechanical means stone metal crust 50mm to 100mm thick by along with 20mm premix carpet / surface dressing and stacking of old serviceable materials including cost of all labour charges, HOM complete as per specifications.(P.No-146,I No-19.52)								
Basic rate	39.00							
Area Weightage 6%	2.34							
Total	41.34							
	Sqm							
Scarifying Roads								
Bettahalli								
1st Cross rd(kr provision)		1	131.00	4.50		589.50		
Cross rd-1		1	35.00	5.30		185.50		
Cross rd-2		1	35.00	4.90		171.50		
Cross rd-3		1	35.00	5.00		175.00		
Cross rd-4		1	64.00	4.80		307.20		
Main Rd		1	190.00	5.50		1045.00		
Cross rd-8		1	41.00	5.00		205.00		
Cross rd-9		1	117.00	5.00		585.00		
Cross rd-11		1	59.00	5.20		306.80		
Cross rd-12		1	93.00	5.00		465.00		
Cross rd-13		1	90.00	5.60		504.00		
Cross rd-14		1	27.00	4.10		110.70		
						4650.20	41.34	192239.27

Description of items	Unit	Qty	Length	Width	Depth	Quantity	Rate	Amount
Construction of granular sub base grading V as per specification by providing coarse crushed stone aggregates of granite / trap/basalt material, mixing in a mechanical mix plant, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory roller to achieve the 98% proctor density, complete as per specifications Clause 401 of M&S (P. No. 15, I No. 20.18)								
Basic rate	1883.00							
Area Weightage 6%	112.92							
Total	1994.92							
	Cum							
Location								
Subbetahalli								
rd-7	1	60.00	5.00	0.15	45.00			
rd-10	1	117.00	5.20	0.15	101.79			
rd-15	1	105.00	5.20	0.15	81.90			
Strengthening Roads								
Cross rd(kr provision)	2	131.00	1.10	0.15	43.23			
rd-1	2	35.00	1.10	0.15	11.55			
rd-2	2	35.00	1.10	0.15	11.55			
rd-3	2	35.00	1.10	0.15	11.55			
rd-4	2	64.00	1.10	0.15	21.12			
Main Rd	2	190.00	1.10	0.15	62.70			
rd-8	2	41.00	1.10	0.15	13.53			
rd-9	2	117.00	1.10	0.15	38.61			
rd-11	2	59.00	1.10	0.15	19.47			
rd-12	2	93.00	1.10	0.15	30.69			
rd-13	2	90.00	1.10	0.15	29.70			
rd-14	2	27.00	1.10	0.15	8.91			
					831.30	1994.92	1059901.00	

M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / basalt to wet mix macadam specifications including pre mixing the material with water at C in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers on paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications (P. No. 15, I No. 20.18)

Basic rate	1888.00							
Area Weightage 11%	113.28							
Total	2001.28							
Location								
Subbetahalli								
rd-7	1	60.00	5.00	0.33	69.00			
rd-10	1	117.00	5.20	0.33	135.96			
rd-15	1	105.00	5.20	0.33	135.96			
Strengthening Roads								
Cross rd(kr provision)	2	131.00	1.10	0.33	43.67			
rd-1	2	35.00	1.10	0.33	11.55			
rd-2	2	35.00	1.10	0.33	11.55			
rd-3	2	35.00	1.10	0.33	11.55			
rd-4	2	64.00	1.10	0.33	21.12			
Main Rd	2	190.00	1.10	0.33	62.70			
rd-8	2	41.00	1.10	0.33	13.53			
rd-9	2	117.00	1.10	0.33	38.61			
rd-11	2	59.00	1.10	0.33	19.47			
rd-12	2	93.00	1.10	0.33	30.69			
rd-13	2	90.00	1.10	0.33	29.70			
rd-14	2	27.00	1.10	0.33	8.91			

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
I-9		1	117.00	5.00	0.23	134.55		
I-11		1	59.00	5.20	0.23	70.56		
I-12		1	93.00	5.00	0.23	106.95		
I-13		1	90.00	5.60	0.23	115.92		
I-14		1	27.00	4.10	0.23	25.46		
						1420.20	2001.28	2842225.86

1500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface
 lar base such as WMM including cleaning of road surface and spraying primer at the rate of
 / sqm using mechanical means complete as per specifications Clause 502 of MORTH V
 (P.No-158,I No-21.6), issue rate dated 01-07-2020

Basic rate	28.00							
Area Weightage 6%	1.68							
Total	29.68							
	Sqm							
mation								
ttahalli								
7		1	60.00	5.00		300.00		
10		1	117.00	5.80		678.60		
15		1	105.00	5.20		546.00		
g Roads								
rd(kr provision)		1	131.00	4.50		589.50		
1		1	35.00	5.30		185.50		
2		1	35.00	4.90		171.50		
3		1	35.00	5.00		175.00		
4		1	64.00	4.80		307.20		
		1	190.00	5.50		1045.00		
8		1	41.00	5.00		205.00		
9		1	117.00	5.00		585.00		
11		1	59.00	5.20		306.80		
12		1	93.00	5.00		465.00		
13		1	90.00	5.60		504.00		
14		1	27.00	4.10		110.70		
						6174.80	29.68	183268.06

0-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared
 oed surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding
 of road surface) including cost of all materials, labour, HOM complete as per specifications
 ,I No-21.7) issue rate dated 01-07-2020

Basic rate	12.00							
Area Weightage 6%	0.72							
Total	12.72							
	Sqm							
ation								
ahalli								
		1	60.00	5.00		300.00		
0		1	117.00	5.80		678.60		
5		1	105.00	5.20		546.00		
Roads								
d(kr provision)		1	131.00	4.50		589.50		

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
rd-1		1	35.00	5.30		185.50		
rd-2		1	35.00	4.90		171.50		
rd-3		1	35.00	5.00		175.00		
rd-4		1	64.00	4.80		307.20		
Rd		1	190.00	5.50		1045.00		
rd-8		1	41.00	5.00		205.00		
rd-9		1	117.00	5.00		585.00		
rd-11		1	59.00	5.20		306.80		
rd-12		1	93.00	5.00		465.00		
rd-13		1	90.00	5.60		504.00		
rd-14		1	27.00	4.10		110.70		
						6174.80	12.72	78,543.46

Item B M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revision using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160, I No-21.17.6), issue rate dated 01-07-2020

Basic rate	6045.00							
Area Weightage 6%	362.70							
Total	6407.70							
	Cum							
Formation								
dbettahalli								
ss rd-7		1	60.00	5.00	0.05	15.00		
ss rd-10		1	117.00	5.80	0.05	33.93		
ss rd-15		1	105.00	5.20	0.05	27.30		
Gravel Roads								
Cross rd(kr provision)		1	131.00	4.50	0.05	29.48		
ss rd-1		1	35.00	5.30	0.05	9.28		
ss rd-2		1	35.00	4.90	0.05	8.58		
ss rd-3		1	35.00	5.00	0.05	8.75		
ss rd-4		1	64.00	4.80	0.05	15.36		
In Rd		1	190.00	5.50	0.05	52.25		
ss rd-8		1	41.00	5.00	0.05	10.25		
ss rd-9		1	117.00	5.00	0.05	29.25		
ss rd-11		1	59.00	5.20	0.05	15.34		
ss rd-12		1	93.00	5.00	0.05	23.25		
ss rd-13		1	90.00	5.60	0.05	25.20		
ss rd-14		1	27.00	4.10	0.05	5.54		
						308.74	6407.70	1978313.30

Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity H.M.P. with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)(P.No-171, I No-21.78.12), issue rate dated 01-07-2020

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
Basic rate	7111.00							
Area Weightage 6%	426.66							
Total	7537.66							
	Cum							
formation								
dbettahalli								
ss rd-7		1	60.00	5.00	0.03	9.00		
ss rd-10		1	117.00	5.80	0.03	20.36		
ss rd-15		1	105.00	5.20	0.03	16.38		
ifying Roads								
Cross rd(kr provision)		1	131.00	4.50	0.04	23.58		
ss rd-1		1	35.00	5.30	0.03	5.57		
ss rd-2		1	35.00	4.90	0.03	5.15		
ss rd-3		1	35.00	5.00	0.03	5.25		
ss rd-4		1	64.00	4.80	0.03	9.22		
n Rd		1	190.00	5.50	0.03	31.35		
ss rd-8		1	41.00	5.00	0.04	8.20		
ss rd-9		1	117.00	5.00	0.03	17.55		
ss rd-11		1	59.00	5.20	0.03	9.20		
ss rd-12		1	93.00	5.00	0.03	13.95		
ss rd-13		1	90.00	5.60	0.03	15.12		
ss rd-14		1	27.00	4.10	0.03	3.32		
Cross rd		1	232.00	5.90	0.03	41.06		
						234.25	7537.66	1765719.47

RB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished face to be level, uniform and free from streaks and holes complete as per specifications. MORTHification No. 803(P.No-182,I No-24.15)

Basic rate	429.00							
Area Weightage 6%	25.74							
Total	454.74							
	Sqm							
formation								
dbettahalli								
ss rd-7		2	60.00	0.10		12.00		
ss rd-10		2	117.00	0.10		23.40		
ss rd-15		2	105.00	0.10		21.00		
ifying Roads								
Cross rd(kr provision)		2	131.00	0.10		26.20		
ss rd-1		2	35.00	0.10		7.00		
ss rd-2		2	35.00	0.10		7.00		
ss rd-3		2	35.00	0.10		7.00		
ss rd-4		2	64.00	0.10		12.80		
ss rd-8		2	190.00	0.10		38.00		
ss rd-9		2	41.00	0.10		8.20		
ss rd-11		2	117.00	0.10		23.40		

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
rd-11		2	59.00	0.10		11.80		
rd-12		2	93.00	0.10		18.60		
rd-13		2	90.00	0.10		18.00		
rd-14		2	27.00	0.10		5.40		
						239.80	454.74	109046.65

B M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of carbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with prismatic lens capable of providing total internal reflection of the light entering the lens face shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH lar No RW/ NH/33023/10-97 – DO III Dt 11.06. 1997. The height, width and length shall not be 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.(P.No-187,I No-24.41)

Basic rate	337.00							
Area Weightage 6%	20.22							
Total	357.22							
	Nos							
formation								
ibettahalli								
rd-7		2	8.00			16.00		
rd-10		2	16.00			32.00		
rd-15		2	15.00			30.00		
tying Roads								
cross rd(kr provision)		2	18.00			36.00		
rd-1		2	5.00			10.00		
rd-2		2	5.00			10.00		
rd-3		2	5.00			10.00		
rd-4		2	9.00			18.00		
Rd		2	27.00			54.00		
rd-8		2	5.00			10.00		
rd-9		2	16.00			32.00		
rd-11		2	8.00			16.00		
rd-12		2	13.00			26.00		
rd-13		2	12.00			24.00		
						324.00	357.22	115739.28

B M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, moulding and centering complete as per specifications. (P.No-222,I No-27.18)

Basic rate	5115.00							
Area Weightage 6%	306.90							
Total	5421.90							
	Cum							
load								
formation								

scription of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
d-5		1	41.00	4.20	0.15	25.83		
d-6		1	17.00	4.30	0.15	10.97		
						36.80	5421.90	199498.81

ucting un-reinforced, plain cement concrete for pavements using Grade concrete M30 over
ared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum, Coarse and fine
ate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed
ncrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved
sign, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick
ene film, wedges, steel plates including levelling the form work as per drawing). & Spreading
ncrete with shovels, rakers compacted using needle, screed and plate vibrator and finished
oaters in a continuous operation including provision of contraction, expansion, construction
ngitudinal joints, including groove cutting charges, joint filler, separation membrane of
niable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved,
compound (P.No-176, I No-22.6.1)

Basic rate	4916.00							
Area Weightage 6%	294.96							
Total	5210.96							
	Cum							
ad								
ormation								
rd-5		1	41.00	4.20	0.15	25.83		
rd-6		1	17.00	4.30	0.15	10.97		
						36.80	5210.96	191737.27
Total Construction Cost								8751683.32
Towards GST 12%								1050202.00
DPR & PMC Charges 2%								198000.00
Sub Total								9999885.32
Miscellaneous & Rounding Off								114.68
Total								10000000.00

Technical Sanction
Accorded For
Head of A/C
CER NO : 97
D 28/8/2020

cate

workspot was inspected and works is found to be necessary.
area comes within the Bruhat Bangalore Mahanagara Palike limits.
rates adopted based on the PWD SR, Bangalore circle for year 2018-2019,
rates dated 01-07-2020 and Data Rates

Assistant Engineer
Ward 03
BBMP Bangalore

Asst. Executive Engineer

Yelahanka New Town Sub Division
BBMP Bangalore

Executive Engineer
Yelahanka Division
BBMP Bangalore

is accorded under head P-3802

Registered CE No. Subject
to conditions contained in enclosed memo
No. EE/YAK/AS/20/2020-21 Dt: 28/8/2020